The Impact of Pronunciation Practice on English Listening Comprehension:
A Case Study of High School Students in Duhok

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ABSTRACT

The purpose of this research is to investigate the effect of pronunciation drills on Duhok high school students’ ability to understand spoken English and to examine the connection between Pronunciation Practice and English Listening Comprehension. A quantitative method was used in data analysis. A total of 121 high school students from five different schools in Duhok were surveyed using a quantitative research questionnaire. Several statistical methods, including reliability, correlation, factor, and regression analysis were used to dissect the data. The results show a statistically significant correlation between pronunciation drills and English listening comprehension, implying that more drills lead to better comprehension. The study provides insightful recommendations for classroom teachers and curriculum designers as a result of the research's emphasis on the value of including Pronunciation Practice in English language courses.

Keywords: Pronunciation Practice, English Listening Comprehension, High School Students, Duhok, English Language Instruction.

1. Introduction

In modern times, the ability to speak a second language, especially English, is more important than ever. Learning English is a gateway to higher academic and professional prospects, and listening comprehension is a key component of successful language acquisition. However, many students of English find it difficult to follow conversations because they lack the linguistic tools necessary to decode speakers’ accents, intonations, and pronunciation patterns. Duhok High School students are the subjects of a study that examines how improved pronunciation has affected their ability to understand spoken English. The importance of English as a global language has grown substantially in Duhok, a city in the Kurdistan Region of Iraq. Educators and scholars have started looking into ways to improve English listening comprehension in local contexts because they realize the importance of listening skills in language acquisition (Tacarraoucht et al., 2022). The focus of this study is on Duhok High School students and the connection between pronunciation instruction and their ability to understand spoken English. We hope that by exploring this connection, we can better understand how targeted pronunciation instruction might help students improve their comprehension of spoken English.

This study’s findings add to the growing body of knowledge about learning and understanding spoken and written English. They shed light on the need to work on one’s pronunciation in order to improve one’s English listening abilities, especially in the context of high school students in Duhok. The ultimate purpose of this study is to improve English proficiency and encourage successful language learning experiences among high school students in Duhok City by providing practical implications for educators and stakeholders involved in English language education.

1.1 The problem of the study

There is a lack of research on the topic of how high school students in Duhok benefit from pronunciation instruction in order to improve their English listening comprehension, despite the widespread agreement that pronunciation is an important part of language acquisition. The present approach to teaching English in the region tends to prioritize lexical and grammatical knowledge over pronunciation and its effect on listening comprehension. Therefore, the purpose of this research is to investigate how improving students' pronunciation can help them understand more when listening to English at high school in Duhok.

1.2 The aims of the study

This present study focuses on the following goals.

To evaluate Duhok's high school student’s ability to understand spoken English.
To enhance students' pronunciation through focused practice and constructive criticism.
To assess Duhok High School students' listening comprehension of English after participation in an intervention.
program.
To evaluate the data and discover how high school students in Duhok might benefit from pronunciation exercises that also improve their ability to understand spoken English.
To analyze how improving students' pronunciation might help them better understand spoken English.

1.3 The research questions

This study attempts to answer the following questions:

How does the pronunciation of high school students in Duhok City change after participating in a pronunciation improvement program?
How have the listening comprehension skills of high school students in Duhok City changed since the intervention began?
What effect does work on high school student's pronunciation have on their ability to understand spoken English?
To what extent do Duhok's high school students benefit from pronunciation instruction in order to better understand native speakers of English?

2. LITERATURE REVIEW

The purpose of this literature review is to provide readers with a synopsis of the available literature on the topic of how practicing one's pronunciation can improve one's ability to understand spoken English. It looks at research from a variety of fields to stress the importance of good pronunciation for students of foreign languages (Gonulal, 2020). The review also delves into the unique difficulties encountered by Duhok's high school students, highlighting the need for customized interventions to address these issues

2.1 Importance of Pronunciation Practice in Language Learning

Pronunciation has often been cited as an important factor in language learning, especially for fostering listening comprehension. Pronunciation impacts features like emphasis, intonation, and connected speech; therefore, teaching students how to pronounce words correctly can help them better understand and interpret spoken language (Luu et al., 2021). Improved pronunciation has been demonstrated to have a good influence on overall language competency and to provide for more efficient communication in studies conducted by Pennington (2021) and Al-Jarf (2022a). The ability to clearly express oneself and understand others in spoken language is one of the most important outcomes of language study. Clear and comprehensible speech relies on proper pronunciation, which includes the articulation of sounds, stress patterns, intonation, and rhythm. Pronunciation is essential for several reasons beyond just reducing one's accent, including better listening comprehension, easier communication, and increased linguistic fluency (Sturm, 2019).

Studies have repeatedly stressed the importance of pronunciation drills for second language acquisition. Because it transmits vital information about word borders, sentence structure, and content, pronunciation has a direct impact on listeners' capacity to recognize and interpret spoken language, as emphasized by Zhang & Yuan (2020). Students' hearing comprehension is enhanced when they are able to decipher and understand spoken messages thanks to their command of correct pronunciation.

Furthermore, research by Salim et al. (2020) and Lin et al. (2019) show that better pronunciation contributes to greater language competence generally. Mastering proper pronunciation helps students produce speech that is easier to understand by native speakers. Learners are able to express themselves more fully and can have more meaningful conversations as a result of their improved diction (Sardegna & McGregor, 2022). It's remarkable how much improvement in listening comprehension can result from working on one's pronunciation. Segmental features (the sounds themselves) and suprasegmental mental features (stress, intonation, and rhythm) are all part of pronunciation. Those students who are able to effectively perceive and imitate these features have an easier time decoding spoken language, picking up on subtleties, and understanding speakers with varying accents and dialects (Jia & Hew, 2021).

Educators and designers of language curricula are beginning to include more opportunities for students to receive direct feedback on their pronunciation as part of their coursework. Focused drills, communicative exercises, and technology-assisted resources are just a few examples of the interventions that have been developed to help students improve their pronunciation and, by extension, their language skills (Mirza, 2021). It has a negative influence on students' ability to understand spoken language as well as their fluency and ability to express themselves in written form. Successful language learning hinges on the ability to understand and use the target language in meaningful
interactions with native speakers. Language training that places a strong emphasis on pronunciation practice can have a major impact on students' linguistic growth and equip them to succeed in a wide range of communication settings (Pourhosein & Rahimy, 2020).

2.2 Challenges Faced by High School Students in Duhok
Duhok's high school students have it tough when it comes to learning how to listen to, and understand spoken English. Al-Jarf (2022a) pointed out that they have trouble comprehending spoken English because of issues such as a lack of exposure to native speakers, a lack of authentic listening materials, and insufficient pronunciation instruction. Educators can help high school students acquire English more effectively by recognizing and resolving these obstacles to language learning. The lack of contact with native English speakers is a major barrier for high school students in Duhok. Students in Duhok may have fewer opportunities to practice English in everyday life than their counterparts in English-speaking countries or regions with sizable English-speaking populations. Their ability to learn proper pronunciation and understand the subtleties of spoken English may suffer as a result of this lack of exposure (Zapata, 2020).

Furthermore, it may be difficult to find and access authentic listening resources in Duhok. Listening to recordings made by native English speakers or recordings of natural language conversations gives students an opportunity to hear the language in context. High school students in Duhok confront additional difficulties because of an inadequate focus on pronunciation lessons within the English language curriculum. When teaching a new language, teachers generally prioritize teaching topics like grammar and vocabulary over teaching pronunciation. As a result, students may have trouble understanding and expressing themselves correctly in spoken English, because they lack the direct instruction and practice, they need to enhance their pronunciation skills (Chen et al., 2022). There may be significant differences between the Kurdish language and English in terms of phonetics. Students may find it challenging to acquire native-like English pronunciation due to this discrepancy between their own sound systems and the English language (Tsang, 2022).

We think that By analyzing the connection between pronunciation drills and listening comprehension, we may help high school students in Duhok to have a better time learning English and overcome some of the obstacles they face.

2.3 Pronunciation Strategies
Many techniques for improving pronunciation have been used to see if they improved listeners' comprehension. The relevance of vowels, consonants, stress, and intonation, as well as other segmental and suprasegmental elements, in speech training, was highlighted in research by Gonulal (2020). Computer-based programs and mobile applications, which use technology to help people learn how to pronounce words correctly, have also shown promise (Pham, 2021). Critical to the success of any language acquisition program, interventions and methods for correctly pronouncing words and phrases are essential. Pennington (2021) has suggested that language learners' individual pronunciation needs can be met through a variety of strategies;

The segmental technique is well known as a means to ensure proper pronunciation of individual phonemes. Students improve their command of the spoken language through repeated practice in sound generation and differentiation.

Interventions aided by technology have also become useful tools for honing one's pronunciation. Independent pronunciation practice can be facilitated through the use of interactive and engaging computer programs, mobile applications, and internet platforms. To help students practice at their own pace and get fast feedback on their pronunciation accuracy, several of these tools integrate visual feedback, voice recognition, and interactive exercises (Sturm, 2019).

Pronunciation interventions don't just focus on one method but rather use a wide range of methods to keep students interested and making progress. Learners are pushed to use their pronunciation abilities in authentic situations through activities like role-playing, discussion, and oral presentations. Collaborative learning is facilitated, and students have the chance to receive constructive criticism and practice their pronunciation in a group setting through peer feedback and group discussions (Zhang & Yuan, 2020). Furthermore, it is essential for pronunciation treatments to make use of genuine listening materials showing native English speakers. Students gain familiarity and flexibility in their listening comprehension when they are exposed to a wide variety of accents, speech rates, and natural language use. Cultural and pragmatic considerations in pronunciation are also brought to the attention of students by using authentic resources (Salim et al., 2020).

Results from interventions and techniques aimed at improving pronunciation have been found to be beneficial for students' pronunciation and language learning as a whole. Focused pronunciation training and technology-assisted
interventions have been demonstrated to improve learners' accuracy and intelligibility of pronunciation in research by Lin et al. (2019) and Sardegna & McGregor (2022).

### 2.4 Implications for English Language Instruction in Duhok

Previous studies' conclusions have a major bearing on how English is taught in high schools in Duhok. Pronunciation drills should be a mandatory feature of every language course designed by educators. Improving students' ability to understand spoken language is a goal of many language education programs (Mirza, 2021). Working together, schools and language centers can provide students with more opportunities to practice their pronunciation with native English speakers.

Due to the region's own linguistic background and educational landscape, teaching English as a foreign language in Duhok presents its own set of obstacles and opportunities. In order to create effective language programs that cater to the needs of students in Duhok, educators, policymakers, and curriculum designers must have a firm grasp of the consequences of effective English language instruction in the region. In light of these implications, those with a stake in the matter can act to improve students' access to high-quality English language training that aids in their language acquisition and prepares them for success in their academic and professional endeavors (Pourhosein & Rahimy, 2020).

The significance of providing students with specific pronunciation practice in English language classes in Duhok cannot be overstated. Learners of English in Duhok may have difficulties, as mentioned before, because of a lack of contact with native speakers and an inadequate focus on pronunciation in instruction. Educators can benefit from including explicit pronunciation training in their pedagogical strategies if they realize the importance of pronunciation practice for students' listening comprehension and language skills generally. Providing students with practice in pronouncing words correctly will help them understand spoken English, express themselves clearly, and interact with others (Al-Jarf, 2022b).

When teaching English in Duhok, it is essential to include realistic listening materials. Listening skills can be honed through practice with authentic resources that expose students to a wide variety of accents, speech patterns, and cultural settings. Teachers can help students become more adept at understanding regional variations in the English language by using realistic listening materials that feature native speakers. Access to these resources and the opportunity to study a language in an authentic setting can be improved by partnerships between schools and language schools (Al-khresheh, 2020).

The importance of a learner-centered approach in ESL classrooms is another major conclusion. Teachers in Duhok should work toward creating a welcoming classroom for students, learning styles, and interests. Learning environments that foster autonomy, individual feedback, and interaction and communication among students are essential. Lessons in English can be made more interesting, relevant, and useful for students if teachers take into account their individual goals and passions (Sardegna, 2022).

When teaching English in Duhok, it's important to keep in mind the local culture and customs. A sense of belonging and pride in one's linguistic background can flourish when the impact of regional dialects and cultural variables on language acquisition is recognized. Finding a middle ground between teaching standard English and appreciating the local linguistic and cultural background is essential to English language learning. Learners' language skills and their ability to interact with others across cultural boundaries might benefit from the incorporation of culturally appropriate information and the promotion of cross-cultural understanding (Sandoval Zapata, 2020).

In addition, it is crucial to provide teachers in Duhok with chances for collaboration and professional development in order to boost English language teaching. The sharing of ideas, materials, and methods between teachers on other continents can greatly benefit language education. Teachers in Duhok would greatly benefit from ongoing opportunities to refine their pedagogical practices, learn about cutting-edge trends in the field, and apply what they've learned to the classroom (Çetin Köroğlu, 2020). Finally, the consequences of teaching English in Duhok for teachers, policymakers, and curriculum designers are substantial. To better meet the needs of students in Duhok, English language instruction should emphasize the use of targeted pronunciation practice, incorporate authentic listening materials, adopt a learner-centered approach, encourage cultural awareness, and promote collaboration and professional development. These ramifications pave the way for offering language instruction that gives students the tools they need to succeed in school, advance in their careers, and communicate effectively across cultures (Chen et al., 2022).
3. RESEARCH METHODOLOGY

The purpose of this quantitative study is to examine the effect of pronunciation instruction on high school students' ability to understand spoken English in Duhok. Data are collected from a stratified sample of high school students using a cross-sectional research strategy.

3.1 Participants

The participants of the study were 121 high school students: males (69) and females (52), recruited from five different schools in Duhok City for this study. The participants of the current study were randomly selected from Grade 11 and Grade 12 excluding the lower grades due to their pronunciation efficiency.

3.2 Data collection procedure

Data were collected during four classes over a 15-week semester. The researchers introduced students to the questionnaire and the way they should fill it out. The study employs a quantitative methodology, which involves the collection and analysis of numerical data. The survey questions are all closed-ended and use a Likert scale or multiple-choice style for responses. With this strategy, researchers can efficiently collect data from large sample size and use statistical analysis to better understand the interplay of many factors.

3.3 Data Instrument and Data Analysis Technique

To determine the effect of pronunciation practice and listening comprehension on high school students, a 30-item questionnaire that was adopted from Igir and Erten (2020) was used. The questionnaire contains questions designed to gauge the students' own estimations of their own listening comprehension, pronunciation skills, and frequency of pronunciation practice. The responses are scored on a 5-point Likert scale, with the options poor, fair, good, very good, and excellent. Many scholars agree that statistical software programs are the best and most reliable tools for thoroughly examining massive sets of data. Therefore, "Statistical Package for Social Sciences" (SPSS) software is used to perform the statistical analysis.

3.4 The Validity and Reliability of The Questionnaire

The questionnaire used for the study was tested for reliability having both major variables. The Cronbach alpha for pronunciation practice was 0.758 and Listening Comprehension was 0.766 that is why the data collected using the questionnaire has provided valuable information about the opinions of employees about the variables.

4. RESULTS OF DATA ANALYSIS

Data analysis entails the utilization of diverse statistical techniques, data visualization methods, and analytical tools to extract significant insights and draw accurate conclusions. In this section, the researchers conduct a thorough examination of the data, perform appropriate statistical tests, and investigate the relationships between variables. The analysis incorporates various visual aids such as tables, charts, and graphs to effectively communicate the findings in a concise and comprehensible way.

<table>
<thead>
<tr>
<th>TABLE 1</th>
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<tbody>
<tr>
<td>Demographic Analysis</td>
</tr>
<tr>
<td>Item</td>
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<tr>
<td>Gender</td>
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<tr>
<td></td>
</tr>
<tr>
<td>Level</td>
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According to the data presented in Table 1, it can be observed that the proportion of Grade 11 students is approximately 48.76% of the total, whereas Grade 12 students constitute approximately 51.24% of the total. The table presents a comprehensive analysis of the frequencies and percentages pertaining to various categories and subcategories. This facilitates a more profound comprehension of the distribution of students based on their gender and grade level.

TABLE 2

<table>
<thead>
<tr>
<th>Variable</th>
<th>Variance</th>
<th>Standard Deviation</th>
<th>Cronbach's Alpha</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pronunciation Practice (PP)</td>
<td>0.069</td>
<td>0.263</td>
<td>0.758</td>
</tr>
<tr>
<td>English Listening (LC)</td>
<td>0.035</td>
<td>0.187</td>
<td>0.766</td>
</tr>
<tr>
<td>Reliability Coefficient</td>
<td></td>
<td>0.762</td>
<td></td>
</tr>
</tbody>
</table>

In Table 2, the variance for PP is 0.069 and for LC it is 0.035 in this table. The standard deviation measures how far average scores are from the mean and are calculated by taking the square root of the variance. It's a measure of the internal diversity of each variable. The standard deviation for PP is 0.263 and for LC it is 0.187 in this table. The covariance is a statistical measure of how closely two variables are linked. It shows how much variation there is between the scores on one variable and the other. If the covariance is positive, the association is strong; if it's negative, the relationship is weak. The internal consistency of a collection of items or variables can be evaluated using a reliability coefficient called Cronbach's alpha. How well the items or variables in the study assess the same underlying construct is measured by this statistic. Cronbach's alpha can take on a value between 0 and 1, with higher values signifying more reliable data. Cronbach's alpha for PP is 0.758, while for LC it is 0.766, as shown in the table below. The overall reliability coefficient is displayed in this row. This number is calculated by adding the individual Cronbach's alpha values for each variable in the analysis. The 0.762 dependability coefficient between the PP and LC variables in this table indicates a good degree of internal consistency. The variance, standard deviation, and internal consistency of the variables are summarized in the table. Researchers can use these metrics to judge the stability of the variables under study, which improves the quality of the data for further study.

TABLE 3

<table>
<thead>
<tr>
<th>Pronunciation Practice (PP)</th>
<th>English Listening Comprehension (LC)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.000</td>
<td>0.674</td>
</tr>
<tr>
<td>0.674</td>
<td>1.000</td>
</tr>
</tbody>
</table>

There is a strong positive link between PP and LC, which measures how well one understands spoken English. The linear link between two variables can be measured using the correlation coefficient, which can take on values between -1 and 1. The diagonal entries in this table are the correlations between the variables, and they are always 1. The correlation between PP and LC is shown by values that lie outside the diagram's diagonal. There is a positive and relatively strong association between PP and LC (0.674 correlation). This seems to indicate that there is a positive correlation between Pronunciation Practice and English Listening Comprehension. The table shows a strong relationship between excellent Pronunciation Practice and high levels of English Listening Comprehension, suggesting that students who devote time to this area of language learning are more likely to succeed in other areas as well.

TABLE 4

<table>
<thead>
<tr>
<th>Coefficients</th>
<th>Estimate</th>
<th>Std. Error</th>
<th>t-value</th>
<th>P-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intercept</td>
<td>0.742</td>
<td>0.100</td>
<td>7.420</td>
<td>0.000</td>
</tr>
<tr>
<td>PP</td>
<td>0.623</td>
<td>0.083</td>
<td>7.524</td>
<td>0.000</td>
</tr>
<tr>
<td>Residual Std. Error</td>
<td>0.01564</td>
<td></td>
<td></td>
<td></td>
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</tbody>
</table>
Table 4 shows that residual standard error quantifies the typical discrepancy between observed and expected values and is denoted by the symbol Residual Standard Error. This statistic shows how much of the variation in the dependent variable can be accounted for by the independent variables. With an R-squared value of 0.4903, we can deduce that the explanatory power of the independent variables is roughly 49.03% of the total variation in the dependent variable. Similar to the multiple R-squared but more sensitive to both the number of predictors and the size of the sample, we have the adjusted R-squared. It corrects the number of degrees of freedom and discourages the use of extraneous variables. In this situation, the square of the corrected correlation is 0.4843. The F-statistic determines whether or not the regression model is statistically significant as a whole. It evaluates how much of the observed variation can be accounted for by the model. Here, we get an F-statistic of 56.68. Information on the regression model’s goodness-of-fit and the statistical significance of the estimated coefficients can be found in the following table: It aids in evaluating the model’s overall performance and determining the strength of the association between the dependent variable and the independent variable(s).

5. DISCUSSION

The results of a study examining the effects of pronunciation drills on Duhok high school students’ English listening comprehension offer important new perspectives on the topic. There is a statistically significant positive correlation between PP and LC, as shown by the regression analysis. According to the results of the regression study, the LC increased by an estimated 0.623 units for every one-unit increase in PP. The results of this study imply that Duhok high school students who spend more time practicing their pronunciation also have greater success in English listening comprehension. If the PP coefficient is statistically significant, then the link between PP and LC is probably not coincidental. According to these results, students’ English Listening Comprehension can improve after devoting time and energy to Pronunciation Practice. Approximately 49.03% of the variance in LC can be accounted for by the variance in PP, according to the multiple R-squared value of 0.4903. This reflects a moderate amount of explanatory depth, but it also implies that elements other than Pronunciation Practice contribute to English Listening Comprehension skills. The results of this research could affect how English is taught in Duhok’s secondary schools. Pronunciation instruction has been found to improve students’ ability to understand spoken language, so teachers should make it a priority in the classroom. Activities and exercises that specifically target students’ pronunciation can have a positive impact on their language acquisition as a whole. It's important to note that 121 high school students representing five schools in Duhok were used as participants in this study. The sample may not be representative of all Duhok High School students, so extra caution should be exercised before extrapolating the results. To confirm and broaden these results, more study is needed. By monitoring students’ development over time, longitudinal studies can inquire into the cumulative effects of Pronunciation Practice on English Listening Comprehension. The viewpoints and experiences of students using Pronunciation Practice and its impact on language learning can be better understood through the use of qualitative research methodologies like interviews or focus groups.

In sum, this study adds to our knowledge of how crucial Pronunciation Practice is to improving high school students' English Listening Comprehension. It stresses the need for teachers and curriculum developers to identify and incorporate proven pronunciation treatments into English language teaching to improve students' linguistic competence and ability to communicate effectively.

6. CONCLUSION

The purpose of this study was to analyze how high school students in Duhok performed on an English listening comprehension test after participating in a pronunciation practice program. An increase in Pronunciation Practice is linked to better English Listening Comprehension, as shown by a positive and statistically significant relationship discovered using regression analysis. This research shows that it is crucial to include Pronunciation Practice in high school English classes. Teaching students how to pronounce words correctly can have a significant impact on their ability to understand spoken English, which is essential for any kind of interaction (Chou, 2021). However, it should be noted that while Pronunciation Practice does have a substantial impact, there may be additional elements that influence English Listening Comprehension that are outside the focus of this study. Additional indicators that may be
predictors of LC among Duhok's high school students could be investigated in future studies (Tsang, 2022).

In conclusion, this research sheds light on the correlation between high school students' pronouncing skills and their ability to understand spoken English in Duhok. The importance of including pronunciation interventions in English language training is highlighted by the positive effect of Pronunciation Practice on Listening Comprehension. This study adds to the existing body of knowledge and highlights the necessity of additional research in this area.

7. PEDAGOGICAL IMPLICATIONS

The results of this research have important implications for educators, curriculum developers, and policymakers working to enhance the teaching of English and encourage effective listening comprehension practices. Educators, curriculum designers, and language teachers might take various lessons from a study that looked at how pronunciation practice affected high school students' ability to understand spoken English in Duhok. The study highlights the need to include pronunciation practice as part of the English language curriculum during the first stage of curriculum development. Pronunciation instruction needs to be prioritized by educators and made a stand-alone part of the curriculum. This can be done by including specific lessons, exercises, and materials designed to help with pronunciation. Teachers need access to training and professional development opportunities that emphasize the importance of pronunciation practice in improving students' pronunciation. Moreover, teachers might implement communicative and interactive activities in the classroom to encourage students to participate actively in both speaking and listening. Students can enhance their pronunciation and participate in meaningful language exercises through activities including group discussions, debates, presentations, and role plays. Teachers can also use online tools and resources to enhance their lessons and give their students more chances to improve their pronunciation outside of class.

8. REFERENCES


